

# DFI 7" ARM Touch Panel PC

for Marine and Retail applications

# DFI®



**KS200**



**KS201**



**KS202**

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The KS200 series is DFI's new IP65 rated Panel PC. The three 7" Panel PCs are powered by the TI® AM3517 Sitara ARM Cortex-A8 microprocessor with speed up to 600 MHz. Based on the ARM architecture, the system is fanless with low power consumption.

The 3 models use the 4-wire Resistive type 7" LCD touch screen panel that has 400 nits brightness and can support WVGA resolution of 800x480.

KS200 comes with a 512MB NAND flash onboard and an SD/MMC slot for extending extra storage. It provides 1 LAN port, 2 COM ports, 2 USB 2.0, and up to 12-bit GPIO for device controls.

One of the models (KS201) comes with 4 customizable function keys. The function keys can be programmed to perform actions according to your needs. Touch screen and function keys improve user interactions which make KS201 ideal for use in supermarkets and retail outlets.

The open frame Panel PC (KS202) allows easy integration into a customized enclosure. You can also design the front bezel according to your application requirements. Open frame design meets vertical markets such as maritime and Kiosk.

The KS200 series supports 14~30V DC power input. Users can benefit from the 2 mounting options: wall mount (VESA 75x75) and panel mount.

With the IP65-certified front panel protection, the panel is protected from ingress of dust and water. This allows easy cleansing of the panel especially in industries that place hygiene a top priority. This feature makes the Panel PC ideal for applications such as the chemical industry, food and beverage industry, marine, and medical applications.



KS200



KS201



KS202

Fanless

TI AM3517 ARM  
Cortex-A8Compliant with  
IEC 60945  
(protected B)

## KS200 Series

Touch Panel PCs

TI® AM3517  
ARM Cortex-A8



**KS200**



**KS201**

with 4 Customizable  
Function Keys



**KS201**

Open Frame Panel PC for  
easy integration into a  
customized enclosure

Fanless

## Features



1 Gigabit LAN Port For Increased Transmission Speed



512MB DDR2 onboard



12-bit digital I/O ports for device controls



2 COM: 1 RS232/422/485 COM port; 1 RS232 COM port



2 Type A USB 2.0



1 SD/MMC card socket

## Front View



Customizable  
Function Keys

- 7" (800x480) WVGA TFT touch screen LCD
- Aluminum front bezel, rugged metal housing
- 4-Wire Resistive type
- 4 Customizable function keys (KS201)

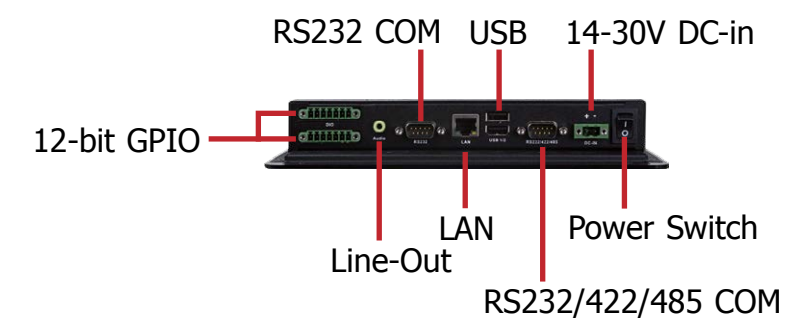
## Top View



Compliant with  
IEC 60945  
(Protected B)

- Used to insert an SD (Secure Digital) and MMC (Multi Media Card)

## Bottom View



Enriched I/O  
Connectivity

- LAN supports 10BASE-T and 100BASE-T
- 12-bit GPIO

## ● IP65 Environmental Protection



Front Panel Protection



- Protects the System Against Ingress of Dust
- Waterproof Protection

## ● KS200

 Windows Embedded CE 6.0



## ● KS201

 Windows Embedded CE 6.0



## ● KS202

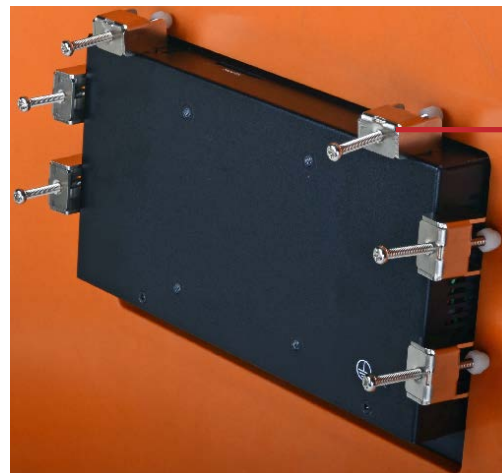
 Windows Embedded CE 6.0



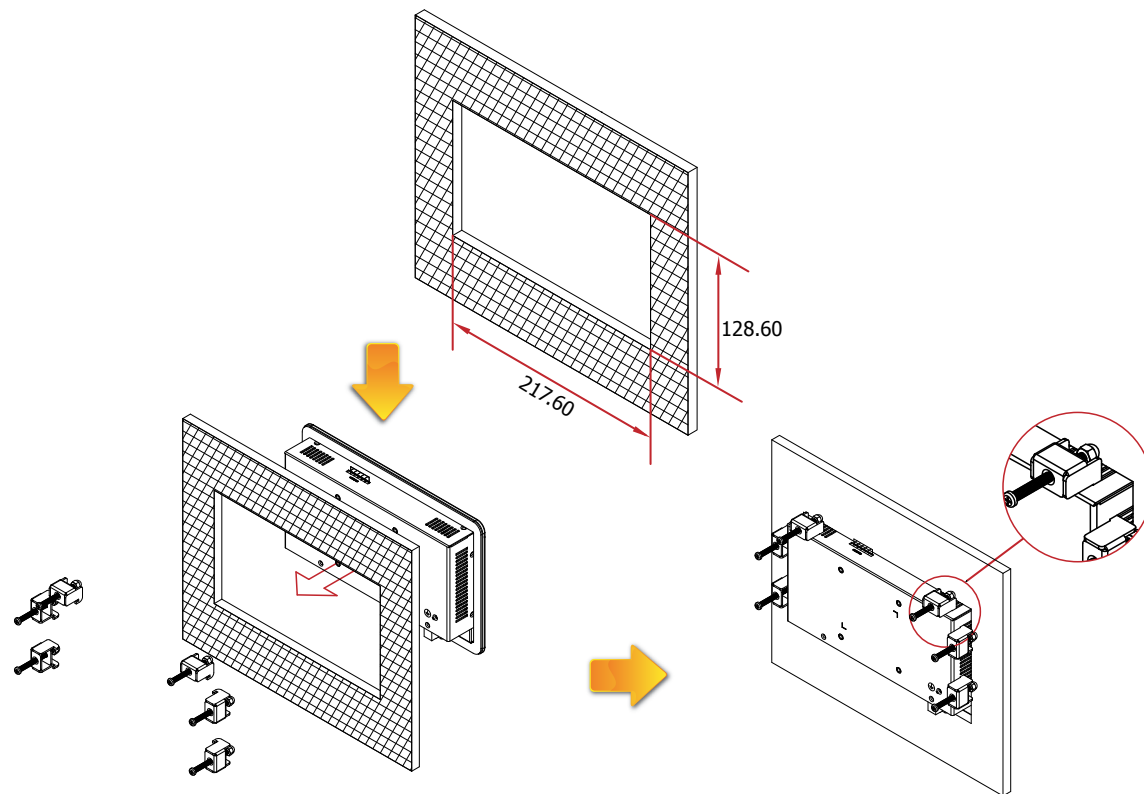


## ● Panel Mount

- Panel mount kit
  - 6 mounting clamps



Mounting clamp



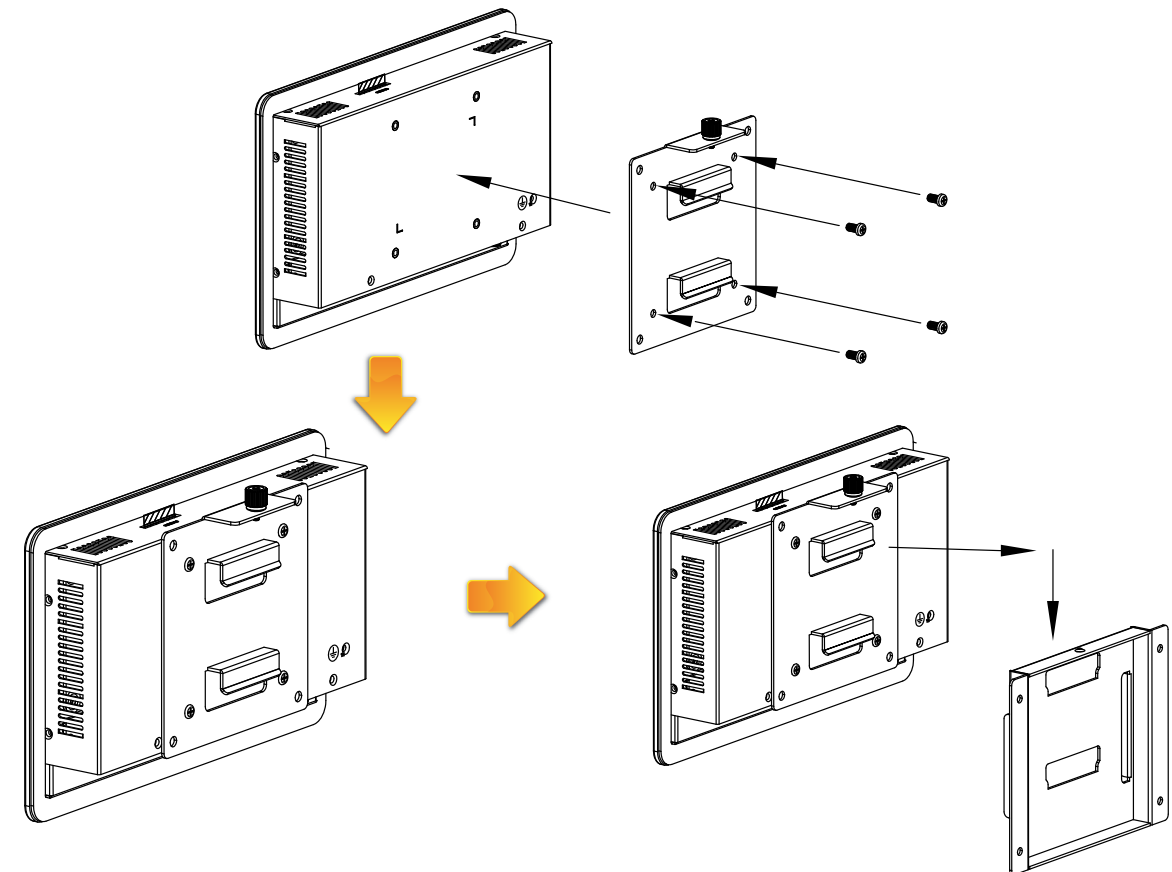
## ● Wall Mount

- Wall mount kit
  - 2 Wall mount brackets
  - Bracket screws



Wall mount bracket 1

Wall mount bracket 2



Wide Range of Applications



POS System



POS System



Production Control



Marine



Control Room



Subway



Model		TI® AM3517		
		KS200	KS201	KS202
Display	Touch Screen Panel	7" WVGA Touch Screen		
	COM: DB-9 D-sub	2		
Bottom I/O	GPIO: 7-pole terminal block	2 (12-bit)		
	LAN: RJ45 with LED	1		
	USB 2.0 Type A	2		
	Mic-in	N/A		
	Line-in	N/A		
	Line-out	1		
	Power switch	1		
	Reset button	N/A		
	DC-in power jack	14~30V		
	PCIe x1	N/A		
Expansion	Mini PCIe	N/A		
	PCI	N/A		
Front Bezel	Power LED	1		
Storage	2.5" Anti-Vibration HDD drive bay	N/A		
	SD/MMC	1		
	mSATA (via mini PCIe socket)	N/A		
	CompactFlash	N/A		
Memory		512MB DDR2 onboard		
Onboard CPU		TI® AM3517		
Dimensions		235mm x 150mm x 40.8mm		230.40mm x 142.32mm x 35.8mm



## Fanless

## System Specifications

### PROCESSOR SYSTEM

- TI® AM3517 Sitara ARM Cortex-A8

### MEMORY

- 512MB DDR2 onboard
- 4 DDR2 64Mx16 RAM

### LCD and TOUCH SCREEN

- 7" (800x480) WVGA TFT touch screen LCD
- Supports touch screen
- TI® TSC2004 touch screen controller
- 400 NITS
- 4-Wire Resistive type

### STORAGE

- 1 SD/MMC card socket
- 512MB NAND Flash
- Samsung K9F4G08U0D flash memory 512Mx 8bit (512MB)

### ETHERNET

- LAN8710 10/100Mbps LAN chip
- 1 LAN port
- Supports 10BASE-T and 100BASE-T

### AUDIO

- 1 Line-out

### COM

- 1 RS232/422/485 COM port
- 1 RS232 COM port

### USB

- 1 TUSB1210 USB transceiver
- 2 Type A USB 2.0/1.1 ports

### GPIO

- 12-bit GPIO connector

### POWER

- Power input voltage
- 14~30Vdc (+/-5%) input

### ENVIRONMENT

- Temperature
- Operating: -20°C ~ 65°C
- Storage: -30°C ~ 80°C
- Relative Humidity
- 95% RH at 65°C, 1 week
- Corrosion
- 4 periods of 7 days at 65°C with 90-95% relative humidity after 2 hours salt spray or waiver

## Features

- TI® AM3517 Sitara ARM Cortex-A8
- 7" WVGA Touch Screen Fanless Panel PC
- 512MB DDR2 onboard
- 512MB NAND Flash onboard
- 1 LAN, 2 USB, 2 COM, 1 SD/MMC, 12-bit GPIO

### I/O PORTS

- Front
- 1 Power LED
- Top
- 1 SD/MMC card socket
- Bottom
- 12-bit GPIO (2 7-pole terminal blocks)
- 1 Line-out
- 1 DB-9 RS232 COM
- 1 RJ45 10/100Mbps LAN with LEDs
- 2 USB 2.0 (Type A)
- 1 DB-9 RS232/422/485 COM
- 1 DC-in (2-pole Phoenix terminal block)
- 1 power switch

### FRONT PANEL PROTECTION

- IP65 (Dust Tight; Water Proof protection)

### CONSTRUCTION

- Aluminum front bezel, Rugged metal housing

### MOUNTING

- Wall mount (VESA 75x75)
- Panel mount (Mounting clamp)

### DIMENSIONS

- 235mm x 150mm x 40.8mm (W x H x D)

### WEIGHT

- 2.10 kg

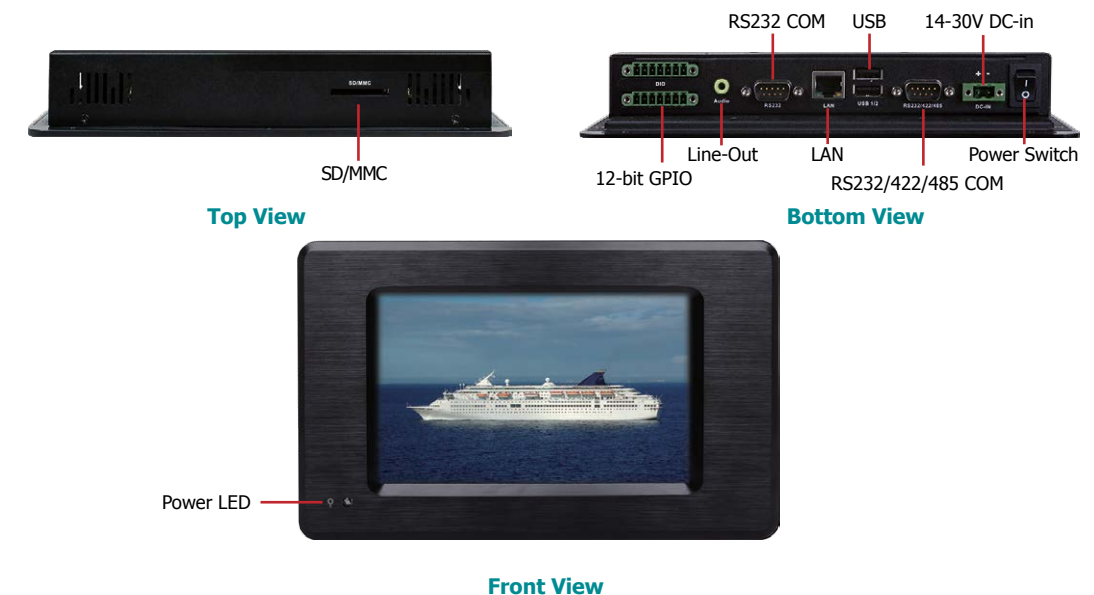
### OS SUPPORT

- Windows CE 6.0
- Linux 2.6.x

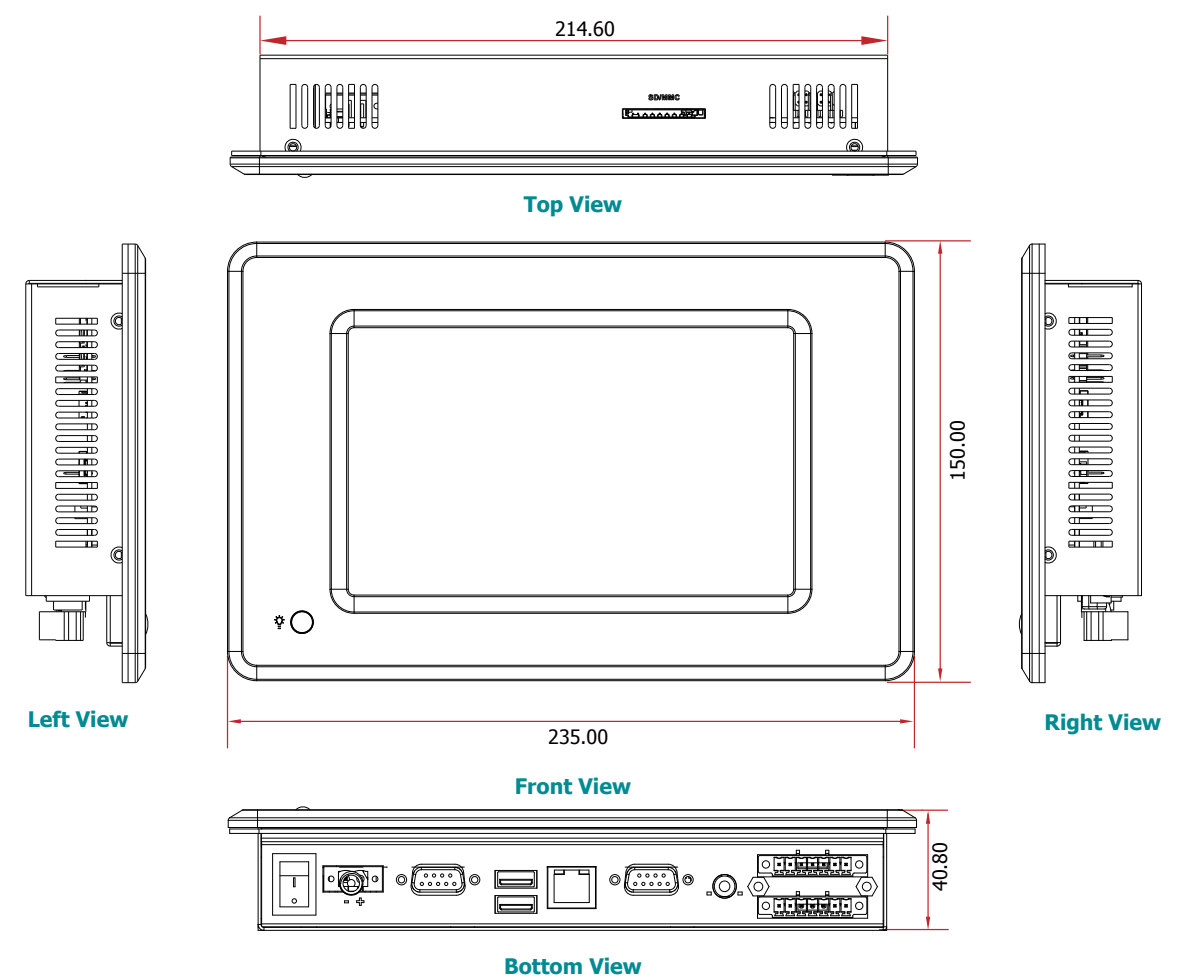
### CERTIFICATION

- CE
- FCC Class B
- Compliant with IEC 60945 (Protected B)

## Panel



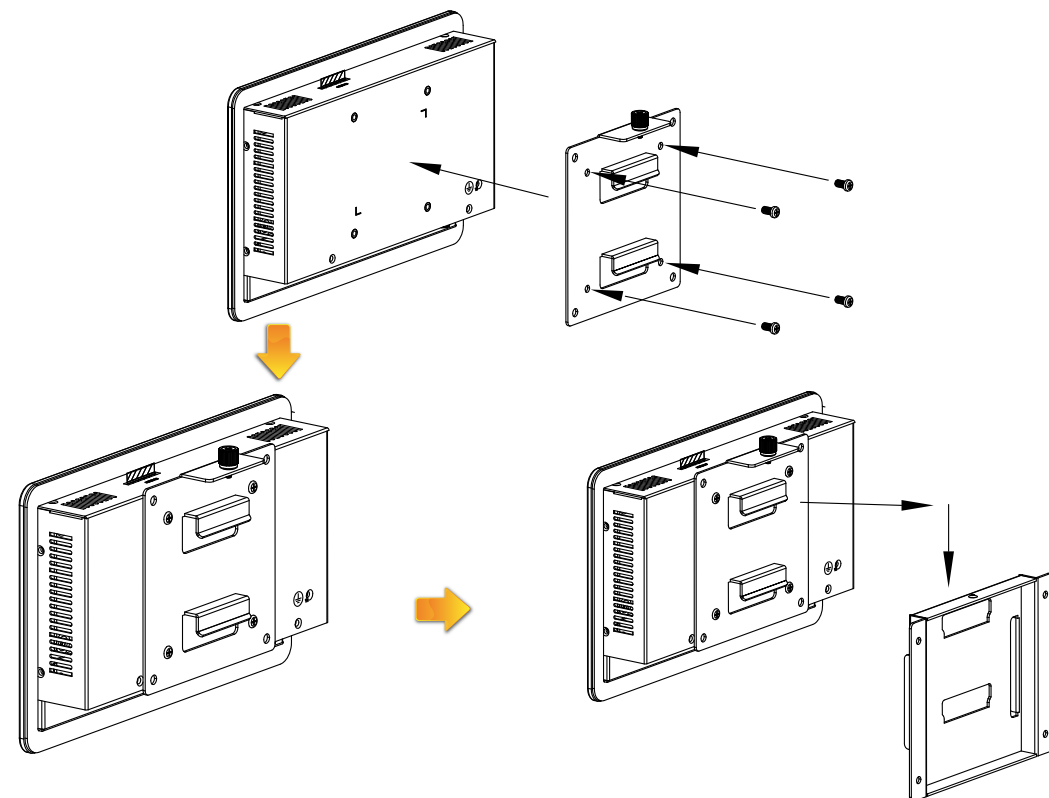
## Dimensions



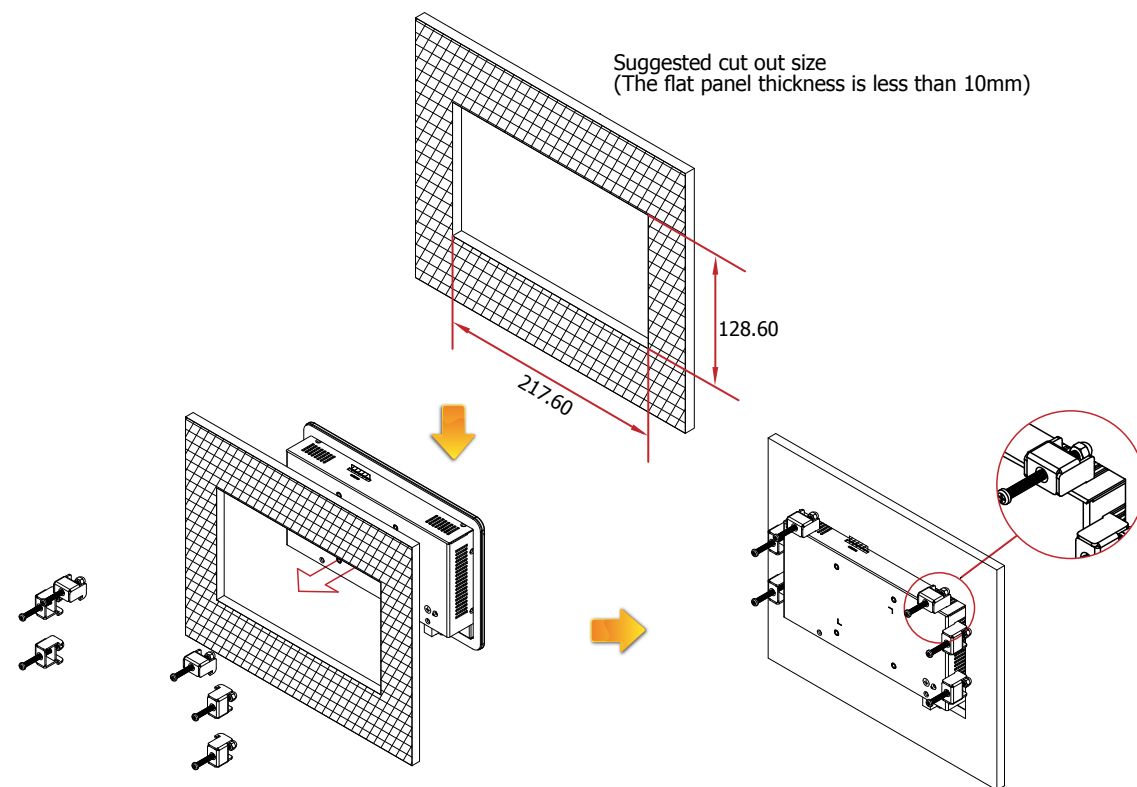


Mounting

Wall Mounting



Panel Mounting



Packing List

- 1 KS200 Touch Panel PC
- 1 Poron foam
- 3 Terminal blocks
- 1 19V power adapter
- 1 Quick Installation Guide
- 1 CD disk includes:
  - Manual

Ordering Information

Model Name	Part Number	Description
KS200	750-KS2000-000G	7" Panel PC, TI® AM3517 ARM, Aluminum Front Bezel, Resistive Touch, DC input, R10

Optional Items

Optional Items	Part Number	Description
Wall Mount	785-PPCWMK	Standard Panel PC Wall Mount kit
Panel Mount	785-070PMK	7" Panel PC Panel Mount kit
Power Cord	785-PWRD	Power cord, Standards (USA/EUR/CH), 1.8m, RoHS





Fanless

## System Specifications

### PROCESSOR SYSTEM

- TI® AM3517 Sitara ARM Cortex-A8

### MEMORY

- 512MB DDR2 onboard
- 4 DDR2 64Mx16 RAM

### LCD and TOUCH SCREEN

- 7" (800x480) WVGA TFT touch screen LCD
- Supports touch screen
- TI® TSC2004 touch screen controller
- 400 NITS
- 4-Wire Resistive type

### STORAGE

- 1 SD/MMC card socket
- 512MB NAND Flash
- Samsung K9F4G08U0D flash memory 512Mx 8bit (512MB)

### ETHERNET

- LAN8710 10/100Mbps LAN chip
- 1 LAN port
- Supports 10BASE-T and 100BASE-T

### AUDIO

- 1 Line-out

### COM

- 1 RS232/422/485 COM port
- 1 RS232 COM port

### USB

- 1 TUSB1210 USB transceiver
- 2 Type A USB 2.0/1.1 ports

### GPIO

- 12-bit GPIO connector

### POWER

- Power input voltage
- 14~30Vdc (+/-5%) input

### ENVIRONMENT

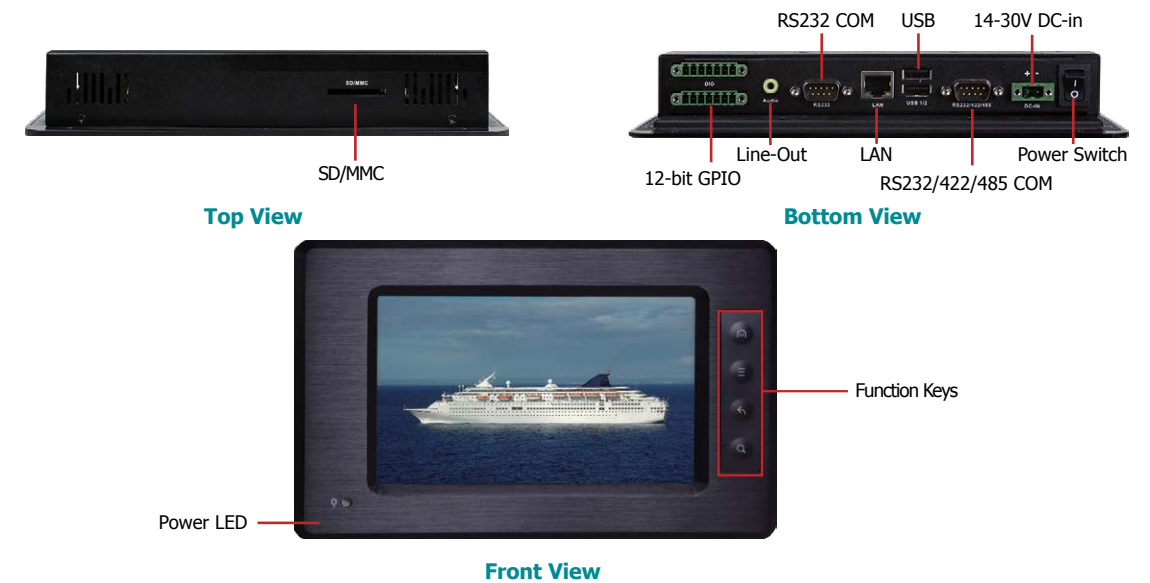
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## Features

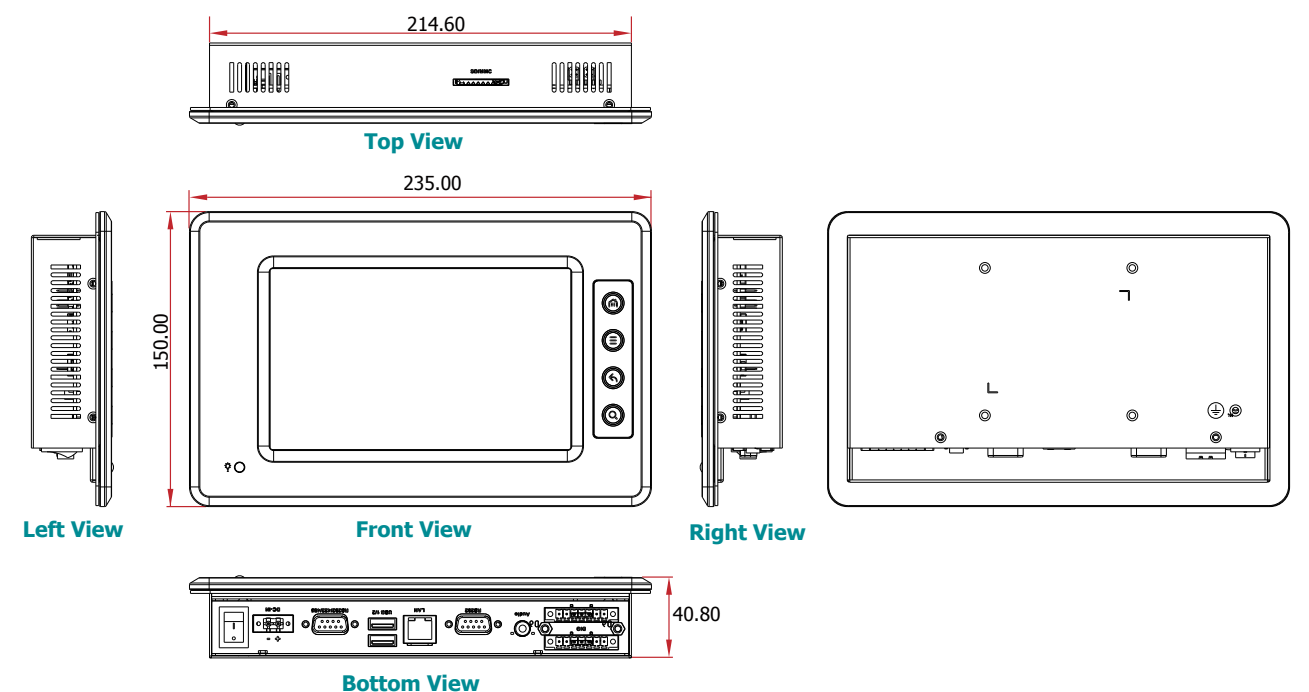
- TI® AM3517 Sitara ARM Cortex-A8
- 7" WVGA Touch Screen Fanless Panel PC
- 512MB DDR2 onboard
- 512MB NAND Flash onboard
- 4 customizable function keys
- 1 LAN, 2 USB, 2 COM, 1 SD/MMC, 12-bit GPIO

Customizable  
Function Keys

## Panel

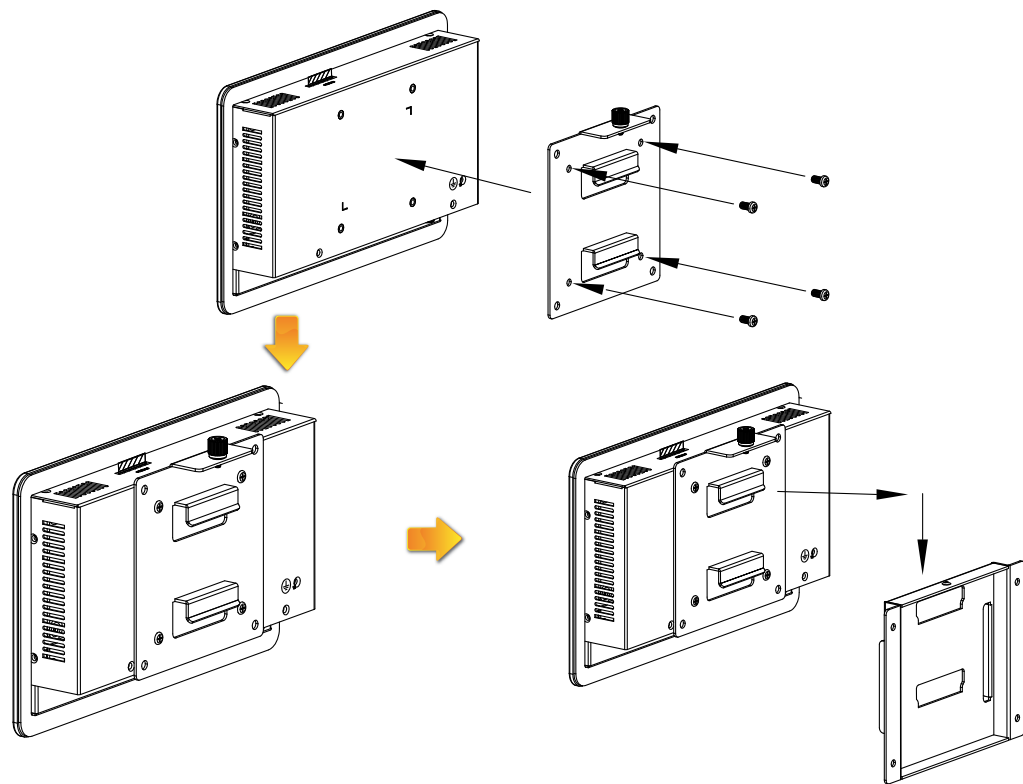


## Dimensions

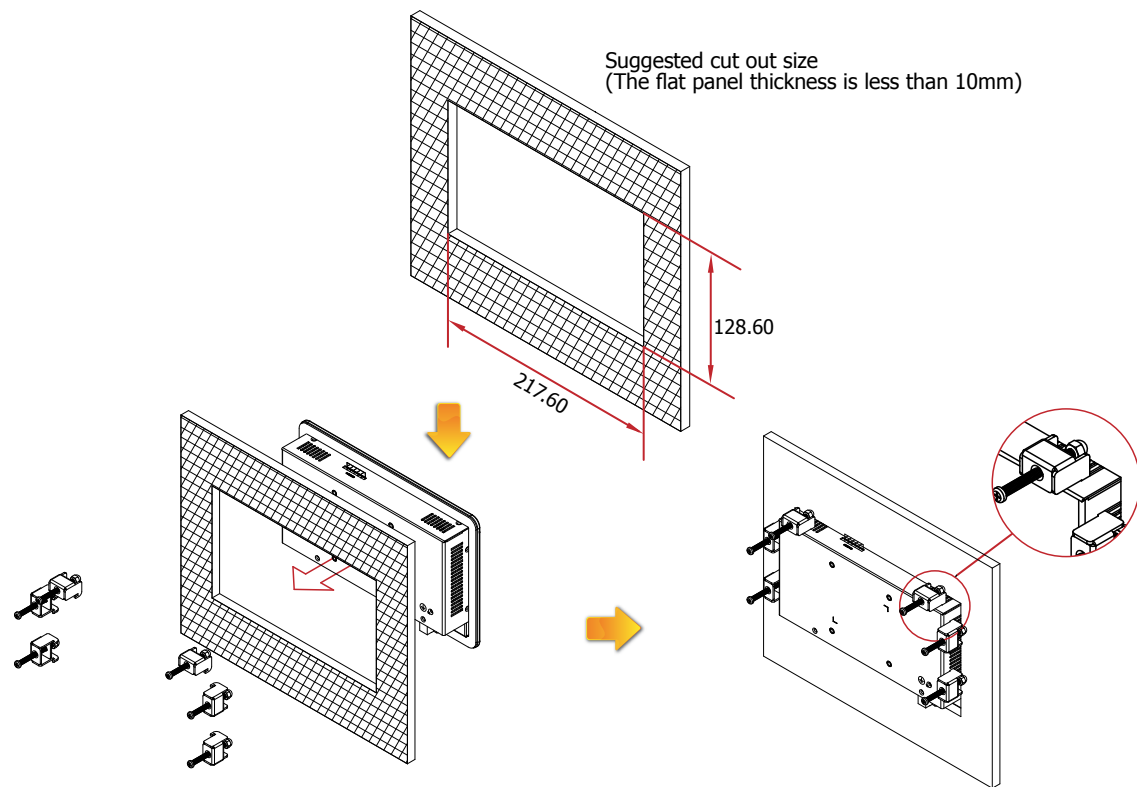


Mounting

Wall Mounting



Panel Mounting



Packing List

• 1 KS201 Touch Panel PC
• 1 Poron foam
• 3 Terminal blocks
• 1 19V power adapter
• 1 Quick Installation Guide
• 1 CD disk includes:
- Manual

Ordering Information

Model Name	Part Number	Description
KS201	750-KS2010-000G	7" Panel PC, TI® AM3517 ARM, Aluminum Front Bezel with function keys, Resistive Touch, DC input, R10

Optional Items

Optional Items	Part Number	Description
Wall Mount	785-PPCWMK	Standard Panel PC Wall Mount kit
Panel Mount	785-070PMK	7" Panel PC Panel Mount kit
Power Cord	785-PWRD	Power cord, Standards (USA/EUR/CH), 1.8m, RoHS



Fanless

System Specifications

PROCESSOR SYSTEM

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MEMORY

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LCD and TOUCH SCREEN

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ETHERNET

- LAN8710 10/100Mbps LAN chip
- 1 LAN port
- Supports 10BASE-T and 100BASE-T

AUDIO

- 1 Line-out

COM

- 1 RS232/422/485 COM port
- 1 RS232 COM port

USB

- 1 TUSB1210 USB transceiver
- 2 Type A USB 2.0/1.1 ports

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- 12-bit GPIO connector

POWER

- Power input voltage
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Features

- TI® AM3517 Sitara ARM Cortex-A8
- 7" WVGA Touch Screen Fanless Panel PC
- 512MB DDR2 onboard
- 512MB NAND Flash onboard
- 1 LAN, 2 USB, 2 COM, 1 SD/MMC, 12-bit GPIO

Open Frame Panel PC for easy integration into a customized enclosure

I/O PORTS

- Front
- 1 Power LED
- Top
- 1 SD/MMC card socket
- Bottom
- 12-bit GPIO (2 7-pole terminal blocks)
- 1 Line-out
- 1 DB-9 RS232 COM
- 1 RJ45 10/100Mbps LAN with LEDs
- 2 USB 2.0 (Type A)
- 1 DB-9 RS232/422/485 COM
- 1 DC-in (2-pole Phoenix terminal block)
- 1 power switch

FRONT PANEL PROTECTION

- IP65 (Dust Tight; Water Proof protection)

CONSTRUCTION

- Aluminum front bezel, Rugged metal housing

MOUNTING

- VESA 75x75

DIMENSIONS

- 230.40mm x 142.32mm x 35.8mm (W x H x D)

WEIGHT

- 1.90 kg

OS SUPPORT

- Windows CE 6.0
- Android 2.1
- Linux 2.6.x

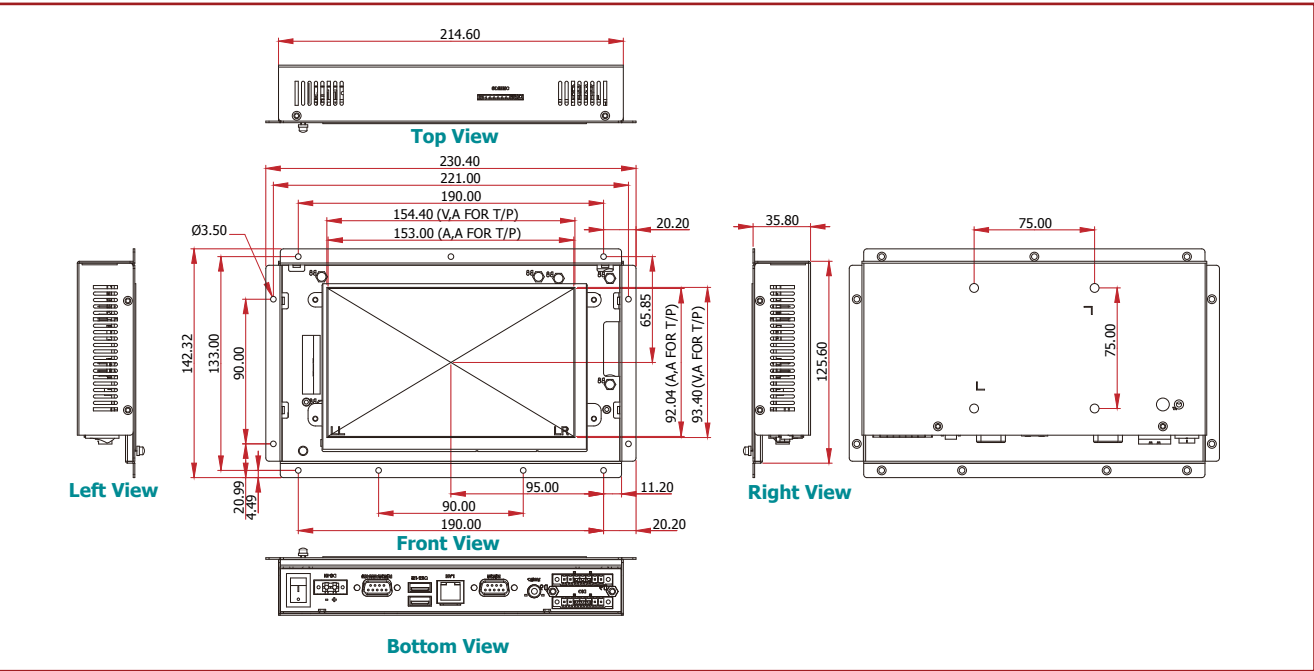
CERTIFICATION

- CE
- FCC Class B
- Compliant with IEC 60945 (Protected B)

Panel



Dimensions



Packing List

- 1 KS202 Touch Panel PC
- 1 Poron foam
- 3 Terminal blocks
- 1 19V power adapter
- 1 Quick Installation Guide
- 1 CD disk includes:
- Manual

Ordering Information

Model Name	Part Number	Description
KS202	750-KS2020-000G	7" Panel PC, TI® AM3517 ARM, Resistive Touch, DC input, R10

Optional Items

Optional Items	Part Number	Description
Wall Mount	785-PPCWMK	Standard Panel PC Wall Mount kit
Power Cord	785-PWRD	Power cord, Standards (USA/EUR/CH), 1.8m, RoHS





Established in 1981, DFI® is a leading supplier of high-performance computing technology worldwide. With more than 30 years of experience, DFI® focuses on innovative design and manufacture of leading-edge board and system level products for embedded applications requiring strict revision control and long life availability. DFI® uses the latest technology platforms and manufacturing techniques to produce cost-effective products for use in medical diagnostic & imaging, ATM/POS, industrial control, kiosk, security & surveillance, digital signage, gaming, and other embedded applications. As an Associate member of the Intel® Embedded Alliance (IEA), DFI® works closely with Intel® on development of next-generation standards-based building blocks, platforms and solutions for the communications and embedded market segments.

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For more information on the 7" Touch Panel PC,  
please visit: [www.dfi.com](http://www.dfi.com)

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